

## City of Kingsport, Tennessee

March 29, 2012

Mr. Jim McAdoo Environmental Protection Specialist, Permit Section Division of Water Pollution Control 6" Floor, L & C Tower 401 Church Street Nashville, TN 37243-1459

Dear Mr. McAdoo,

Please accept the following application for an Inter-Basin Transfer Permit renewal on the behalf of the City of Kingsport.

Please review the following information. If you have any questions please contact me at (423)-229-9452.

Sincerely,

Sam Thomason Water Plant Superintendent

## **City of Kingsport**

## **Board of Mayor and Alderman**

**Mayor: Dennis Phillips** 

Vice Mayor: Tom Parham

Alderman:

Valerie Joh

**Jantry Shupe** 

**Mike McIntire** 

**Tom Segelhorst** 

John Clark

**Prepared By:** 

**Sam Thomason** 

**Water Plant Superintendent** 

**Prepared for:** 

**State of Tennessee Department of Environment and Conservation** 

**401 Church Street** 

L & C Annex, 6<sup>th</sup> Floor

Nashville, TN 37243-1534

## Inter Basin Transfer Application City of Kingsport Kingsport, TN

- a. The volume of proposed withdrawal and the proposed transfer stated in gallons per day that the applicant seeks to be authorized. The proposed permit will be for 150,000 gallons per day. The Town of Jonesborough will be the recipient of the transferred water.
- b. Identification of all of the withdrawal, return and transfer point. The withdrawal point is the South Fork Holston River at mile 6.2 (Map#1). The intake structure is located on John B. Dennis Parkway. There is only one transfer point for the Town of Jonesborough. A six -inch meter is located at 101 Butcher Town Road (Map #2).
- c. The volume of water that will be returned to the basin of origin or a downstream basin; none of the water sold to the Town of Jonesborough is expected to return to the Holston/Watauga River Basin.
- d. The peak capacity of each major component in the proposed withdrawal and transfer facilities; The peak capacity of the Kingsport water filtration plant is 28 million gallons per day. No changes will be necessary at the filtration plant to accommodate the increase water needed for the transfer. The maximum ninety day period during the period of July I, 2010 through June 30, 2011 transferred water to the Town of Jonesborough was 104,900 gal. The request of 150,000 gallons was determined from our previous conversation and also as a precautionary measure to allow for unexpectedly high demands that may occur.
- e. Engineering and economic justification for the capacity of each major component of the proposed withdrawal and transfer facilities; the water being transferred comes from City of Kingsport's river intake located on the South Fork Holston River. It is pumped to the filtration plant and there made ready for consumption. High service pumps pull the water from the 1.5 million-gallon clear well and deliver the water to the distribution system. It will arrive at the transfer point through a series of pipes ranging in six from six to thirty inches. The water also passes through Colonial View pump station as well as Colonial View Tank. No changes are necessary at the filtration plant for the increase in transfer.
- f. An assessment of the hydraulic and environmental impacts of the withdrawal on the losing river; there will be no adverse hydraulic or environmental impacts on the South Fork Holston by the increase in transfer. The South Fork Holston River is a large river system with an average daily flow of approximately 3123 cubic ft./sec.
- g. An engineering, environmental and economic assessment of the feasibility of utilizing alternate water sources by the water system in the receiving basin; Jonesborough is currently unable to provide water to the Butcher Town Road area. Stewart's Hill, a .5 MG storage tank, serves a portion of this area. However, due to the elevation of the tank they are unable to consistently provide the minimum pressure required to the area. Town of Jonesborough has recently laid pipe out to the Butcher Town area, but is still experiencing pressure difficulties. The Town of Jonesborough has long term plans of erecting a 2-MG storage tank to help reduce the demand on the Stewart's Hill storage tank. This will alleviate pressure fluctuations in Butcher Town. Jonesborough will continue to utilize the Jonesborough Water Treatment Plant as the primary water source for its customers.
- h. A listing of conservation programs or practices occurring or proposed of the system in the receiving river basin; Jonesborough does not implement any formal water conservation program at this time. However, the Washington County school system does include water conservation in its curriculum.

| i. The proposed date upon which the water transfer is to commence; the inter-basin transfer from the Holston/Watauga Basin to the French Broad/Nolichucky Basin is an existing transfer.  |
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| j. The purpose and justification for the proposed transfer; the transfer from the City of Kingsport will provide water to an area that Jonesborough is currently unable to provide. Jonesborough has future plans to provide water to the Butcher Town area. If successful the connection between the two utilities will remain for emergency situations. |
| Signed:   |
| City of Kingsport Mayor Dennis Phillips   |